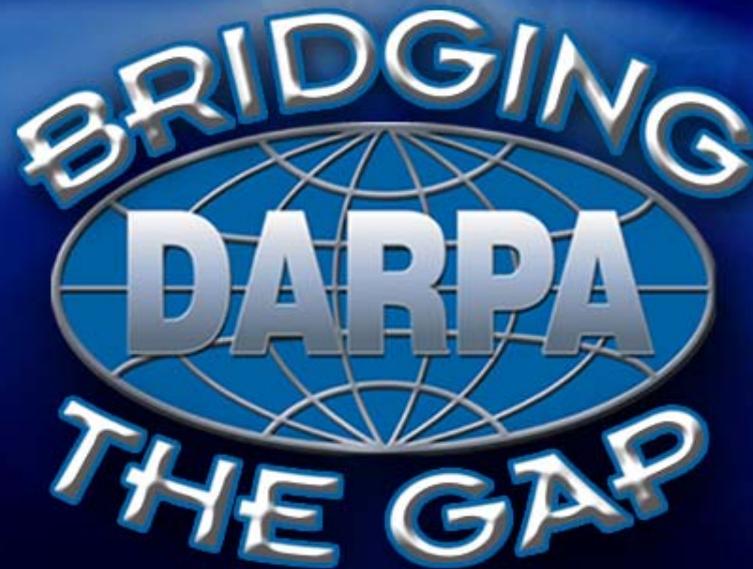
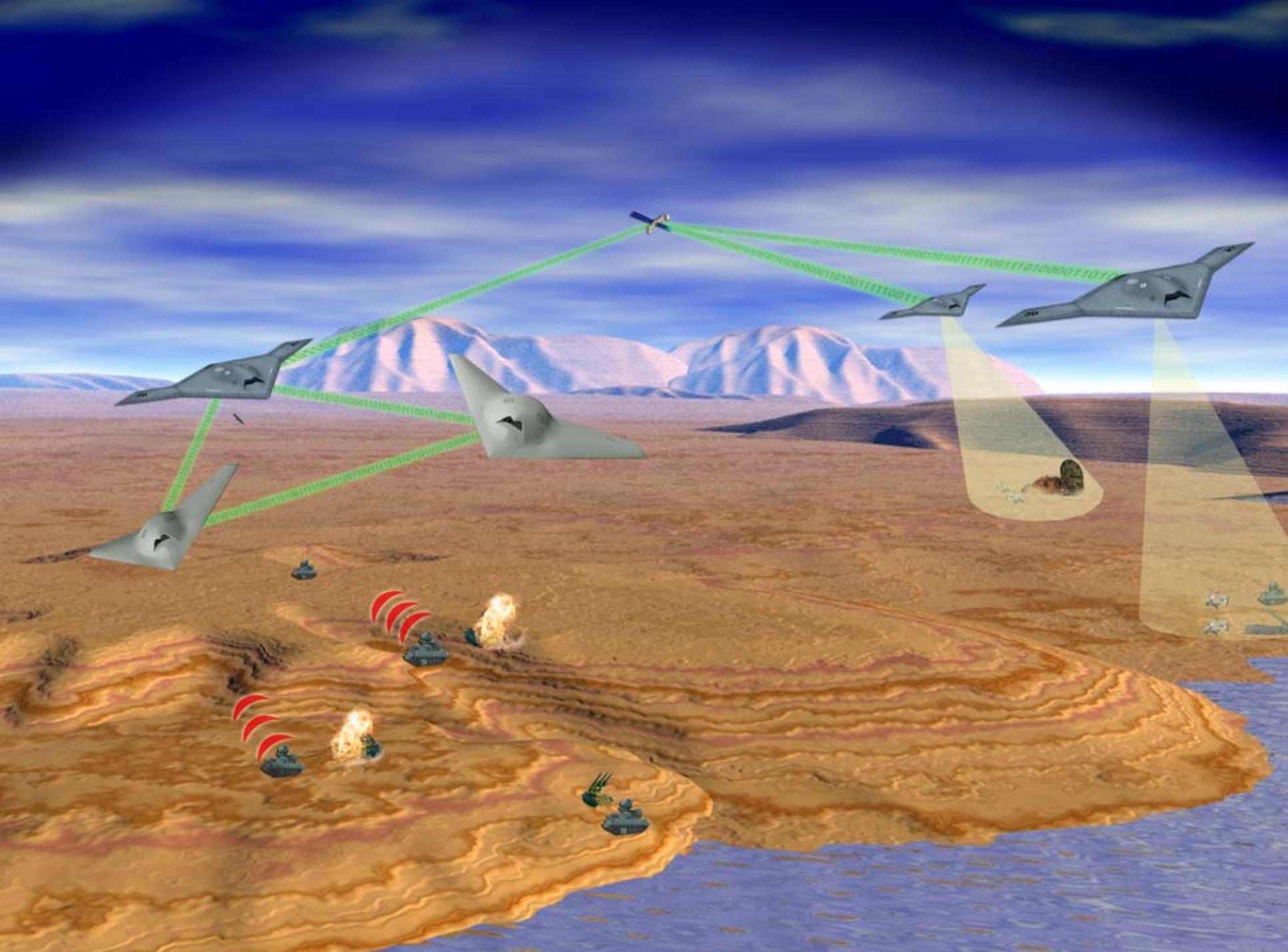
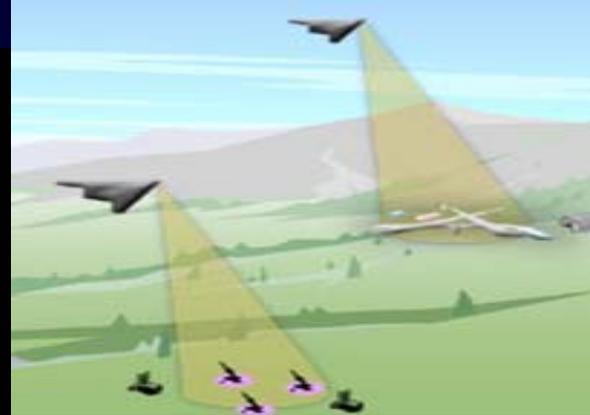


Joint Unmanned Combat Air Systems

Dr. Mike Francis

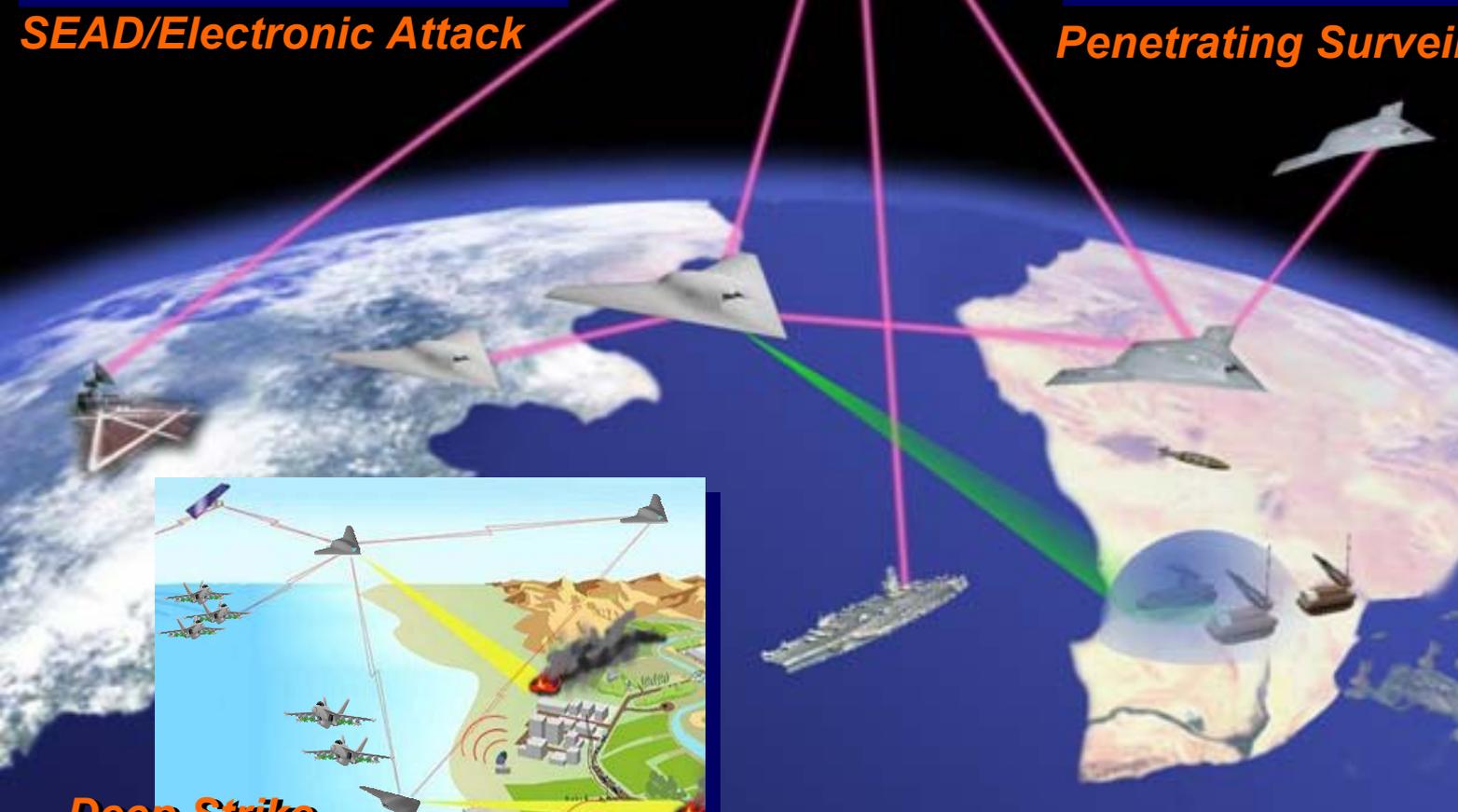






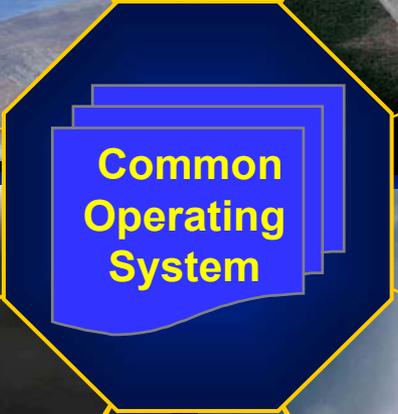
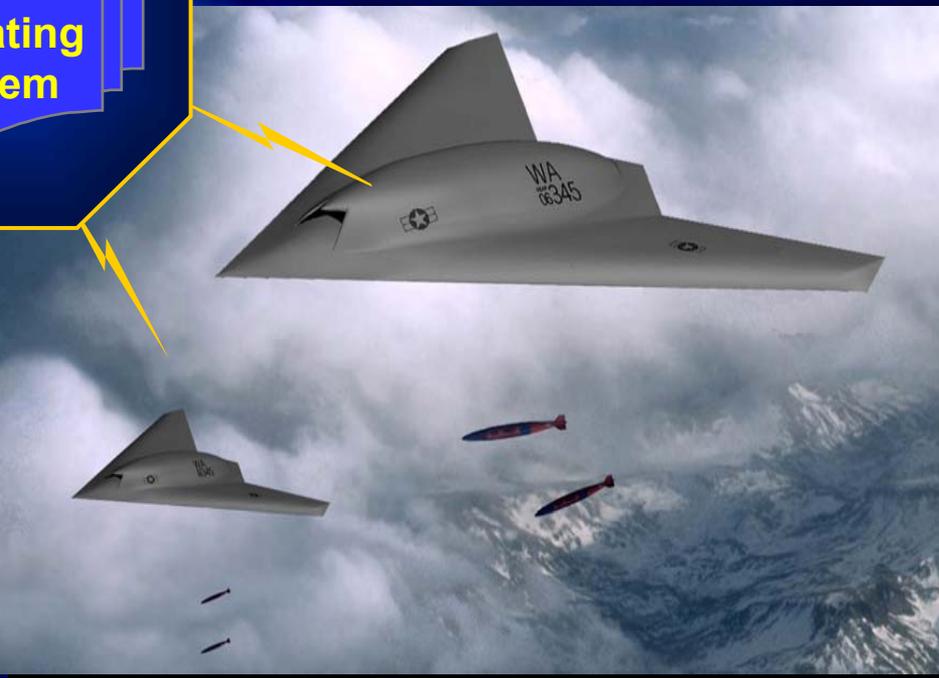
SEAD/Electronic Attack

Penetrating Surveillance



Deep Strike





**Common
Operating
System**

Origins



DARPA Accomplishments



JSTARS

1970



ATACMS

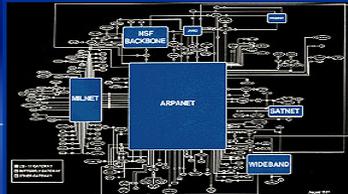


Global Hawk



UCAV

1980



Arpanet

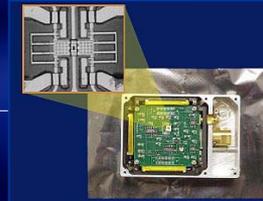


Uncooled IR



JSF

2000



MEMS

1990



Stealth Fighter



GPS



Predator



BAT



MALD



